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(54) Title: WATER-SOLUBLE ANIONIC BACTERIOCHLOROPHYLL DERIVATIVES AND THEIR USES

(57) Abstract: The invention provides anionic water-soluble tetracyclic and pentacyclic bacteriochlorophyll derivatives (Bchls) containing at least one, preferably two or three, negatively charged groups and/or acidic groups that are converted to negatively charged groups at the physiological pH, preferably Bchls having a group COO<sup>-</sup>, COS<sup>-</sup>, SO<sub>3</sub><sup>-</sup>, PO<sub>3</sub><sup>2-</sup>, COOH, COSH, SO<sub>3</sub>H, and/or PO<sub>3</sub>H<sub>2</sub> bound through an ester or amide bond to one or more of the positions 17<sup>3</sup>, 13<sup>3</sup>, and 3<sup>2</sup> of the tetracyclic or pentacyclic Bchl molecule, for photodynamic therapy and diagnosis.

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